Claims

[c1] WHAT IS CLAIMED IS:

1.A method for spelling correction of a phrasal string, comprising:

segmenting the phrasal string into a plurality of different segmentations;

determining a cost associated with each of the plurality of different segmentations; and

identifying a segmentation having a lowest cost corresponding to a most probable correct spelling of the phrasal string.

[c2] 2.The method as set forth in claim 1, further comprising spell correcting each of the plurality of different segmentations using dictionary looping.

[c3] 3.The method as set forth in claim 2, wherein dictionary looping further comprises comparing each of the plurality of different segmentations with entries in a phrasal dictionary.

[c4] 4.The method as set forth in claim 3, wherein the phrasal dictionary is capable of containing phrasal strings including phrases, words and spaces.

[c5] 5.The method as set forth in claim 2, wherein the cost is a cost of correcting each of the plurality of different segmentations.

[c6] 6.The method as set forth in claim 1, wherein each of the plurality of different segmentations includes contiguous sub-strings over the phrasal string.

[c7] 7.The method as set forth in claim 6, further comprising spell correcting sub-strings of a segmentation using dictionary looping.

[c8] 8.The method as set forth in claim 7, wherein dictionary looping further comprises performing a looping search through a phrasal dictionary to compare each of the sub-strings with entries in the phrasal dictionary to find an entry having a closest match.

[c9] 9.The method as set forth in claim 8, further comprising constructing a corrected segmentation using the closest match for each of the sub-strings.

[c10] 10.A computer-readable medium containing computer-executable instructions for performing the process recited in claim 1.

[c11] 11.A method for spelling correction of a misspelled phrasal string containing words, spaces and characters, comprising:
receiving the misspelled phrasal string;
dividing the misspelled phrasal string into a plurality of segmentations;
comparing each of the plurality of segmentations to entries in a dictionary; and
determining a best segmentation from the plurality of segmentations that represents the most probable correct spelling of the misspelled phrasal string.

[c12] 12.The method as set forth in claim 11, wherein each of the plurality of segmentations contains sub-strings.

[c13] 13.The method as set forth in claim 12, wherein comparing each of the plurality of segmentations to entries in a dictionary is performed by finding a closest match between sub-strings of a segmentation and a dictionary entry.

[c14] 14.The method as set forth in claim 11, further comprising determining a cost associated with each segmentation.

[c15] 15.The method as set forth in claim 14, wherein the best segmentation is a segmentation having a lowest cost.

[c16] 16.The method as set forth in claim 14, wherein hierarchical parameters are used to determine the cost associated with each segmentation.

[c17] 17.The method as set forth in claim 16, wherein the hierarchical parameters include at least one of: (a) a length of a dictionary entry; (b) a probability of a dictionary entry given a context of neighboring words of the phrasal string.

[c18] 18.A phrasal spelling correction system for spelling correction of a phrasal string, comprising:
a segmentation module that divides the phrasal string into a plurality of segmentations, each of the plurality of segmentation containing sub-strings;
a looping comparator that corrects a segmentation by comparing each of the

sub-strings of the segmentation with entries in a dictionary to determine a closest match; and

an output string containing a corrected segmentation having the lowest cost that represents a correct spelling of the phrasal string.

[c19] 19.The phrasal spelling correction system as set forth in claim 18, wherein the looping comparator determines a cost associated with each of the plurality of segmentations.

[c20] 20.The phrasal spelling correction system as set forth in claim 19, further comprising a hierarchical module that provides hierarchical parameters to the looping comparator to determine the cost.

[c21] 21.The phrasal spelling correction system as set forth in claim 20, wherein the hierarchical parameters include a length of a dictionary entry and a probability of a dictionary entry given a context of neighboring words of the phrasal string.

[c22] 22.The phrasal spelling correction system as set forth in claim 18, wherein the dictionary is a dynamic phrasal dictionary containing phrasal strings capable of containing words, phrases, characters and spaces.

[c23] 23.The phrasal spelling correction system as set forth in claim 22, further comprising a dynamic update module that provides dynamic updating of phrasal dictionary entries.